

Docket No.: 1793.1064

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re the Application of:

Hyung-Joo KANG et al.

Serial No. 10/720,744

Group Art Unit: 2627

Confirmation No. 3111

Filed: November 25, 2003

Examiner: Parul H. Gupta

For: OPTICAL PICKUP ACTUATOR AND OPTICAL RECORDING AND/OR REPRODUCING  
APPARATUS AND METHOD FOR THE SAME

**PRE-APPEAL BRIEF CONFERENCE REQUEST**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

The Applicants respectfully request review of the rejection mailed July 24, 2008 in the above-identified application. No amendments are being filed with this request. This request is being filed with a Notice of Appeal.

Claims 2, 5, 6, 10, 13 and 14 were previously cancelled. Claims 1, 3, 4, 7-9, 11, 12 and 15-23 are pending. Claims 1, 3, 7, 9, 11, 15 and 17-23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,181,670 to Nagasato et al. in view of U.S. Patent No. 6,130,418 to Van Rosmalen et al. Claims 4, 8, 12 and 16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Nagasato, Van Rosmalen et al. and U.S. Patent Pub. No. 2003/0198148 to Choi et al. A pre-appeal brief panel review of the appealable issues is requested.

**I. Nagasato**

**a. "a focusing coil member and a tracking coil member installed on the base, separated from each other"**

The Examiner alleges that Nagasato discusses a focusing coil member and a tracking coil member installed on the base, separated from each other. Nagasato discusses that the focusing and tracking coils for each of two coil units 112, 114 are disposed on a base block 8 and that two magnets 116, 118 (5a-d) are disposed on a lens holder opposite the two coil units 112, 114. Each of the coil units 112, 114 includes a focusing coil 9a, 9b and tracking coils 10a,

10b, 10c and 10d. Nagasato does not discuss or suggest, then, that the focusing coil member for each coil unit is separated from the tracking coil member. The coil unit 112 has a focusing coil 9a and tracking coils 10a, 10b that surround the focusing coil 9a (see Fig. 7). The coil unit 114 has a focusing coil 9b and tracking coils 10c, 10d that surround the focusing coil 9b (see Fig. 7).

Thus, Nagasato does not distinguish that the focusing and tracking coil members are separated from each other.

Additionally, as conceded by the Examiner, Nagasato does not discuss that a single magnet member is installed on the lens holder between the focusing coil member and the tracking coil member and that the focusing coil member, tracking coil member and the single magnet member are installed on one side of the objective lens.

## **II. Van Rosmalen**

### **a. “a single magnet member installed on the blade between the focusing coil member and the tracking coil member”**

The magnet 45 of Van Rosmalen is not installed on a blade which carries an objective lens. The magnet 45 is installed on the stationary part 33, not on the movable part 35 that carries the lens 15. The magnet 45 is not installed on the movable part 35, which is the blade that carries the objective lens 15. Thus, Van Rosmalen is in direct opposition to the language of claim 1 and Van Rosmalen therefore teaches away from claim 1.

Further, although the Examiner cites Nagasato to teach a focusing coil member and a tracking coil member installed on the base, separated from each other, it should be noted that Van Rosmalen teaches away from claim 1. In particular, in Van Rosmalen, the focus coil 39 and the tracking coils 41 are carried by the movable part 35 and not by a base such as the stationary part 33.

### **b. Combination of Van Rosmalen and Nagasato**

#### **i. Unsatisfactory for its intended purpose**

While Van Rosmalen does show a focusing coil member 39, a tracking coil member 41 and a magnet member 45 installed on one side of the lens 15, combining Van Rosmalen with Nagasato would render Nagasato unsatisfactory for its intended purpose, which is not permitted in accordance with M.P.E.P. § 2143.01.

Nagasato specifically utilizes two sets of coil units 112, 114, multiple magnets 116, 118 and multiple magnetic blocks 136, 138. If Nagasato were to utilize the magnet 45 of Van

Rosmalen, but without both sets of coil units 112, 114 or without an additional permanent magnet, Nagasato would be rendered unsatisfactory for its intended purpose, which is to be able to correct the tilt of the objective lens 1 relative to the signal recording surface of the optical disk. Without two sets of coil units 112, 114 and two opposing magnets 116, 118, the apparatus of Nagasato would not be able to perform its intended purpose.

Further, if the focusing coils 9a, 9b, tracking coils 10a, 10b, 10c and 10d and the magnet member 116, 118 of Nagasato were to be installed on one side of the objective lens 1, as in Van Rosmalen, then Nagasato would be rendered unsatisfactory for its intended purpose. Specifically, Nagasato would not be able to move the lens holder 2 in the manner in which it is intended by Nagasato. If all of the focusing coils 9a, 9b, tracking coils 10a, 10b, 10c and 10d and the magnet member 116, 118 (even presuming only one magnet is utilized), then the lens holder 2 would not be able to be moved to correct the tilt of the objective lens 1.

## **ii. Change the principle of operation of Nagasato**

Further, modifying Nagasato in view of Van Rosmalen would change the principle of operation of Nagasato. Nagasato requires the use of two sets of coil units and two sets of magnets opposing the coil units for the apparatus to be operable. If the single magnet 45 of Van Rosmalen were incorporated into Nagasato, the principle of operation of Nagasato would be changed.

## **iii. Motivation**

The Examiner alleges that "it would have been obvious to one of ordinary skill in the art at the time of the invention to include the concept of installing all of the elements on one side of the objective lens and a single magnet into the system of Nagasato et al. as taught by Van Rosmalen et al. The motivation would be to reduce the device in size and thickness to reduce costs and to have an efficient use of the magnetic driving forces."

However, the motivation cited does not explain how the features of Van Rosmalen would be able to be incorporated into Nagasato. In particular, the focusing 9a, 9b and tracking 10a-d coils of Nagasato are supported by a fixed base 8 and the magnets 116, 118 are supported at the movable lens holder 2. In contrast, the focus coil 39 and the tracking coils 41 of Van Rosmalen are supported by the movable part 35 of the apparatus and the permanent magnet 45 is supported by the stationary part 33. Thus, it is unclear as to how or where the focus 39 and tracking 41 coils and the permanent magnet 45 of Van Rosmalen would be able to be incorporated into the apparatus of Nagasato since the coils of Van Rosmalen are supported by the movable part and the magnet is supported by the stationary part.

Also, the cited motivation does not suggest why the focusing and tracking coils would be installed on a base with a single magnet member installed on a blade having the objective lens.

In contrast, the present specification particularly states at page 2, paragraph 0010 that one of the problems with a conventional asymmetric optical pickup actuator is that since the coils are directly in contact with the blade in which the objective lens is mounted, heat generated by applying current to the coils is directly transferred to the blade and the objective lens, thereby reducing the rigidity of the blade. At page 10, paragraph 0054, the present specification states that in the optical pickup actuator of the present invention, even though the optical pickup actuator has a slim type, the actuator does not have reduced performance due to heat. The motivation cited by the Examiner does not explain how or why the focusing coil, tracking coil and magnets of Nagasato would be positioned at one side of the objective lens (as in Van Rosmalen), particularly where the focusing and tracking coils are installed at the stationary base and a single magnet is installed at a movable part including the objective lens. The present invention provides for such so that heat is not directly transferred to the movable part that includes the objective lens.

Additionally, the cited motivation does not suggest how Nagasato can operate such that the focusing coil and tracking coil would be separated from each other if only one single magnet member is used. Particularly, if only one magnet member is used, then there would only be one coil unit. As each coil unit includes a focusing coil and tracking coils that are not separate from each other, then if one magnet member is used, the modified Nagasato reference would not meet the claim features of claim 1.

Claims 9 and 17 recite features similar to that of claim 1.

Claims 3, 7, 11, 15 and 18-23 depend either directly or indirectly from independent claims 1, 9 and 17 and include all the features of their respective independent claims, plus additional features that are not discussed or suggested by the reference relied upon. Therefore, claims 3, 7, 11, 15 and 18-23 patentably distinguish over the reference relied upon for at least the reasons noted above. Accordingly, withdrawal of the § 103(a) rejection is respectfully requested.

### **III. Choi**

As discussed above with respect to independent claims 1 and 9, the combination of the teachings of Nagasato and Van Rosmalen does not suggest all the features of independent claims 1 and 9. Choi fails to make up for the deficiencies in Nagasato and Van Rosmalen. Claims 4, 8, 12 and 16 depend either directly or indirectly from independent claims 1 and 9 and include all the features of claims 1 and 9, plus additional features that are not discussed or

suggested by the references relied upon. Therefore, claims 4, 8, 12 and 16 patentably distinguish over the references relied upon for at least the reasons noted above. Accordingly, withdrawal of the § 103(a) rejections is respectfully requested.

### Conclusion

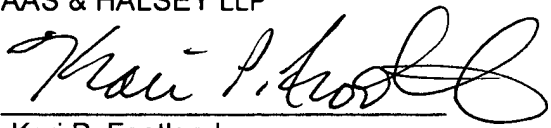
In accordance with the foregoing, claims 1, 3, 4, 7-9, 11, 12 and 15-23 are pending and under consideration.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited. Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters. If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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Date: 11/24/08

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